Planning An Evaluation Design

Over the past year, SEIR*TEC < www.seirtec.org > has been developing resources and providing training on evaluation for schools and districts that receive grants from the Enhancing Education Through Technology (EETT) program. The training is designed to help grantees understand some basic elements of project evaluation and to assist them in drafting plans for evaluating the implementation and impact of their projects. The evaluation materials represented here are for the evaluation of a comprehensive technology project or program, which may be a multiyear project that includes professional development, technical support, and information/technology integration into the curriculum. Educators with one-year projects can tailor the materials according to their needs.

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What is Evaluation?

Evaluation is the process of judging the value or worth of some product, project, or program. The content in this document is focused primarily on Wisconsin EETT project evaluation. The results of evaluation help project stakeholders make decisions about their project's impact on instruction and learning, as well as revising/improving or continuing/ending projects (e.g., the procedure needs improving, the project is not worthy of continued funding).

Why is Evaluation Conducted?

Evaluation is typically conducted for three reasons: (1) to determine what type of project should be developed (needs), (2) to determine if a project has been implemented as intended (accountability), and (3) to determine the effects of a project (utility) (Rossi & Freeman, 1989).

Evaluation is also conducted to monitor the implementation of a project. A program manager who is accountable to a funding agency is interested in the documentation of internal processes and lessons learned, or a program sponsor wishes to verify that funded projects are being implemented as promised. In such cases, evaluation can help to verify that the specified target populations are receiving the treatment as promised, or the specified procedures are being carried out as indicated (i.e., "We said we would do X, and here is the evidence that we did X.").

Finally, evaluation is conducted to determine if a project has met the goals set for it or has achieved desired outcomes. This type of evaluation is the most powerful to argue for project continuation or replication, as it provides evidence that some initiative is related to or caused a positive change (i.e., "We said the project would lead to X, and here is the evidence that the project has effected X.").

When is Evaluation Conducted?

As noted above, the work of evaluation can span the life span of a project from pre-conceptualization, to monitoring implemented initiatives, to judging any effects after implementation. The terms formative and summative evaluation are often used to specify when an evaluation is conducted. A formative evaluation occurs when a project is being designed or implemented to determine if ongoing processes should be revised. A summative evaluation occurs after a project has been implemented to determine if the initiative met the goals set for it and therefore should be adopted or continued as an effective treatment. Summative evaluations take two forms--effectiveness studies just after a new project has been implemented in full, and impact studies several months to years after a project has been implemented in full (longitudinal).

It is best to develop an evaluation plan at the same time that the project design is being planned. Early involvement will help for two reasons. First, it will allow for the collection of baseline data. Second, it will allow for structuring the evaluation plan to the project goals, measurable objectives, and activities of the project. Thus the Evaluation Design is determined during the project design process and then it is refined under the guidance of an External Evaluator after the grant is awarded.

What are the criteria for an External Evaluator?

An External Evaluator is a person(s) conducting the evaluation process. The person(s) conducting the evaluation should be both trustworthy and competent to perform the evaluation, so that the evaluation findings achieve maximum credibility and acceptance. Evaluators are credible to the extent that they exhibit the professional training, technical competence, substantive knowledge, experience, integrity, public relations skills, and other characteristics considered necessary by clients and by the federal and state funding agencies. An External Evaluator provides the client with a resume, professional recommendations, and samples of previous instructional technology evaluation designs and reports. Evaluators maintain a pattern of consistent, open, and continuing communication and approachability with their clients and other stakeholders while still offering expertise and maintaining impartiality. (Joint Committee on Standards for Education Evaluation, 1994)

Evaluation Planning

An **evaluation plan** represents your outline for the evaluation process. In the Wisconsin EETT request for grant proposals (RFP), the applicant is asked to provide an evaluation plan. The evaluation plan preparer should address each of the following components.

introduction	provide background on the project being evaluated, and identify who or what is being evaluated, who is doing the evaluating, who has asked for the evaluation, and who will benefit from the evaluation findings (stakeholders)
purpose	indicate why the evaluation is being conducted (to identify needs, for accountability, to determine effectiveness)
goals and questions (see section II for more information on evaluation questions, and models that help guide questioning)	Specify the set of goals the project is based upon and then provide at least one evaluation question for every goal. (Final evaluation questions will be developed by the evaluation committee under the direction of the external evaluator after the project award is made.)
indicators and benchmarks (see section II for more information on data collection)	Provide sample indicators for each evaluation question, what evidence will be used to inform the questions (i.e., student achievement will increase 5% over the length of the project); also, provide sample benchmarks for each indicator, what are the expected intervals of change (Final project indicators will be developed under the direction of the external evaluator.)
methods (see section III for more information on data collection)	the design of the evaluation (e.g., case study, randomized trial, mixed methods); the sample; sources of data; instruments (e.g., student reports, teacher interviews, surveys),; a matrix showing which data or instruments will inform which evaluation questions or indicators (this design will be finalized with the external evaluator for he project.)
analysis (see section IV for more information on analysis and reporting)	how collected data will be processed: statistical procedures to be used, qualitative synthesis strategies to employ
timeline	a month-by-month plan for data collection, analysis, and reporting
budget	a listing of cost items and their prices (These costs will be between 5% and 10% of the total project budget.)

Note: a well-prepared evaluation plan can be readily converted to an evaluation report. An evaluation report should include all of the information provided in your original plan, as well as additional sections that outline results, a discussion of the results, recommendations, and limitations to the study (reliability, validity).

Forming an Evaluation Committee

A district-wide evaluation committee is the organizing structure of project evaluations. As an initial step, districts create a project evaluation committee composed of stakeholders from throughout the district and local community. This committee closely parallels the structure of the LEA's technology planning committee in that in order for the committee to be effective; it must be representative of the interests and concerns of the broad district community or of the eligible local partnership. It is also important that the committee not be composed entirely of individuals who are considered the educational technology power users in the district. Remember, the evaluation is designed to answer basic questions about educational technology's impact on teaching and learning. Therefore, experience in teaching and learning is considerably more important than being well-versed in technology itself. In general, the a workable committee numbers about 12 to 15 members and includes district-level staff, a board member, and principals, as well as classroom teachers and library media and technology specialists from all grades or divisions and representing all participating districts in the local eligible partnership.

Evaluation Committee Composition Matrix

To create and conduct your technology evaluation, you need a committee composed of educational stakeholders who will actively work to help create the evaluation. Remember:

- You will need committee members who represent all aspects of your project community. This means teachers (from a variety of grades and/or subject areas), administrators, parents, community members (e.g., businesspeople), and perhaps students.
- Do not load your committee with figureheads who are not willing to actually work on the plan.
- The evaluation process contains many different tasks. You need writers, curriculum people, infrastructure people, people who are good with budgets, and policy people.
- The commitment to be a part of the project evaluation committee is not a short-term commitment. A formative evaluation by definition is ongoing and iterative. The committee members should be willing to assist in the project's evaluation efforts long after the data are collected and reports are written.

Sample Evaluation Committee Composition Matrix

	Teachers	Administrators	Parents	Others
Curriculum				
Professional Development				
Infrastructure				
Process Tasks (edition, calling meetings, etc.)				

Taken from *Planning into Practice*

Steps in Evaluating an EETT Project

Step 1—Evaluation framing, committee orientation, and rubric development

Just as with information & technology planning, EETT project evaluation is a committee-driven process. Therefore, the first step in this process is for the LEA or eligible local partnership to select an external evaluator and to appoint an evaluation committee composed of representative stakeholders such as teachers, administrators, parents, board members, and students. The exact composition varies and reflects the values and priorities of the project. Once the committee is selected, the external evaluator facilitates a full day of training for the committee. During this training, the entire evaluation process is overviewed, milestones are set, and initial responsibilities are assigned.

After the initial day of training, the committee works with the external evaluator for another two days to develop the project's key evaluation questions and to create indicators for those questions. While the developed indicators are always tied directly to project goals, also key the indicators are keyed to *Wisconsin's Model Academic Standards for Information & Technology Literacy*.

In most cases, the evaluation committee breaks into subcommittees to develop indictors for individual questions. Once the indicators have been developed and approved by the project committee, all of this work is organized into a set of indicator rubrics. Sample rubrics can be located at www.sun-associates.com/eval/sample.html.

Step 2—Data collection and analysis

Data collection is designed in response to the project's evaluation rubrics. Data are gathered that will enable the evaluation committee to answer the evaluation questions. Typically, a data collection effort will include:

- Surveys of teachers, administrators, students, and/or community members. Unique surveys are created for each target population and are based on the data collection needs described in the district's rubrics.

- Focus group interviews of teachers, administrators, students, technology staff, and other groups of key participants in the district's educational and information/technology efforts.

- Classroom observations. The external evaluator will typically spend time in schools and classrooms through out the project districts. The evaluator not only oversee teachers and students using information process and technology but also learns much about how information & technology literacy is being used to impact teaching and learning just by observing classroom setups, teaching styles, and student behaviors.

It is important that the data-collection effort not rely on a single data source (e.g., surveys). The project needs to design a data-collection strategy that has the optimum chance of capturing the big picture of the use and impact of information/technology within the district. This will require the simultaneous use of multiple data-collection strategies and the triangulation.

Step 3—Findings, recommendations, and reporting

Reporting is important to a formative evaluation in that it establishes a common base for reflection. An evaluation that is not shared with the community it evaluates never results in reflection. Reflection is necessary for positive and informed change. The first step in reporting is to take the data gathered in the previous stage to score the project's performance against its own rubrics.

These scores—along with a detailed explanation of how scores were given—form the basis of the report. In addition, reports typically contain detailed findings and recommendations. The recommendations relate to how the application of the project can adapt or change current practices to achieve higher levels of performance in succeeding years. The recommendations are always based on a research-intensive knowledge of best practices as related to teaching, learning, and information/technology. Recommendations are relative to findings. In other words, recommendations are in sync with the project's desired outcomes as documented in its indicator rubrics.

In most cases, evaluation projects end with a formal presentation to the project committee and other audiences as identified by the overseeing administrator. This presentation includes a printed report of all data and data analysis that is prepared by the professional evaluator. The LEA(s) then distributes the document to the funding agency and education institutions and begins dissemination of best instructional practices and sound models for professional development and implementation of lesson design.

These steps for evaluating an EETT project are appropriate for LEAs and eligible local partnerships. As the chart (Evaluation Process) indicates, this is a cyclic process for continuous improvement of local educational programs and for greater impact on raising student academic achievement.

Evaluation Planning Sample – Objective

Objective: **100% *Wisconsin's Model Academic Standards for Information and Technology* (ITL) Literacy will be integrated throughout the curriculum of all participating teachers.**

Supporting Activities/Strategies

- Teachers, staff, and administrators participate in high quality professional development.
- Teachers develop (or adapt) and implement information & technology literacy-enhanced lessons and instruction.
- Administrators, teachers, and staff identify/develop educational information and technology resources.
- Students use information processing and technology regularly as a learning tool.

Impact Questions (So What?)	**Indicators**	**Methods/Measures/ Data Sources**	**Benchmarks**	**Use of Evaluation Findings**
What difference does it make?	***What does success look like?***	***How will you find out?***	***What are your intermediate targets?***	***What do you do with the results?***
What impact does the integration of ITL standards and benchmarks throughout the curriculum have on students' use of technology for learning? What difference does the integration of ITL standards and benchmarks throughout the curriculum have on student learning? What impact does the integration of ITL standards	Teachers select and use ITL standards and benchmarks appropriate for each curriculum area. Students use ITL standards and benchmarks to learn curriculum and to meet state standards. The quality of student products is improved. Student achievement scores are improved.	Review of lessons plans in view of the curriculum Classroom observations Review of student products using a standard form Nine-week grades End of grade tests Students records: attendance, discipline,	By mid year, x% of the teachers' lesson plans incorporate the appropriate use of ITL processes and tools; by the end of the year Y% of the teachers' lessons plans incorporate the appropriate use of ITL processes and tools X% of students score satisfactory or above	Determine barriers to ITL integration throughout the curriculum. Recommend changes in instructional practices. Examine alignment of enhanced ITL lesson plans to curriculum.

and benchmarks have on students' attitudes, behaviors, and academic achievement, e.g. attendance, discipline referrals, drop out rate, intervention referrals, and assessment data?	Students' attitudes and behaviors improve	drop out …	on product rubrics by mid-year Y% of the student score satisfactory or above on product rubrics by the end of the year. Each nine-week period, X& of students whose grades can improve, do improve. X% of students who are not at or above grade level score at or above grade level.	

Evaluation Management Plan

What is an Evaluation Management Plan?

The Evaluation Management Plan is the systematic design of the Evaluation Plan. The Evaluation Management Plan is the proper selection or creation of the evaluation systems required for implementation of the Evaluation Plan. It begins with detailed, thoughtful conceptual mapping of the program's intended outcomes, the way that these outcomes will be reached by the program inputs and project milestones or benchmarks that must be reached along the way. Finally, it includes the timeline that allows these elements to unfold. Building and implementing a strong Evaluation Management Plan starts with a logic model of the project, continues with the timeline for development of the data collection instruments, the implementation of data collection, and concludes with the timeframe, person(s) responsible, and specific resources needed for the evaluation activity.

The professional evaluator will facilitate this process, so that the workflow of the project becomes measurable and obtainable. The management plan will allow the development of thorough, convincing evidence of how the program successes are documented and how these successes might be continued or replicated. (NWREL, 2005)

Evaluation Planning Template – Management Plan

Evaluation Activities	Description/Data Source	Timeframe	Person Responsible	Resource(s)
What evaluation activities will occur?	***What data collection tools will be used?***	***When will the evaluation activity occur?***	***Who will be responsible for ensuring the activity occurs?***	***What resources do you need to do the evaluation?***

Note: This Evaluation Management Plan template is adapted from *Planning for Evaluation by* SEIR*TEC www.seirtec.org 2005.